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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/642,636	08/19/2003	Alex Hornig	HORN3161/EM	3739
23364	7590	09/28/2004	EXAMINER	
BACON & THOMAS, PLLC 625 SLATERS LANE FOURTH FLOOR ALEXANDRIA, VA 22314			NGUYEN, NINH H	
			ART UNIT	PAPER NUMBER
			3745	

DATE MAILED: 09/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/642,636		HORNG ET AL.	
	Examiner		Art Unit	
	Ninh H. Nguyen		3745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 9-20 is/are rejected.
- 7) ☒ Claim(s) 8 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 3-5, 12-15, and 17-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In each claim, the limitation of the guiding ring extending "downward" is indefinite because the orientation of the heat-dissipating fan is unclear. As a result, "downward" means differently depend on the orientation of the fan. Therefore, a person in the art cannot make and use of the invention without undue experimentation. It is suggested that "downward" be changed to --down stream-- to avoid indefiniteness.

Note: it is assumed that the guide rings extend in down stream direction in this Office Action.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 2, 7, 9, 10, 11, and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Harmsen (6,017,191).

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Harmsen discloses a heat-dissipating fan (Figs. 1-7) comprising a casing having an air outlet, a base 8 mounted in the air outlet, an impeller (not shown) being adapted to be mounted on the base and having a plurality of blades (Fig. 1); a plurality of ribs 14 each extending between the base and the casing along a radial direction of the base; and at least one guiding ring 16 fixedly mounted to the ribs, the at least one guiding ring having an axial length that is longer than a width of the at least one guiding ring in the radial direction (Fig. 2), said at least one guiding ring guiding and dividing airflow passing through the air outlet when the impeller is turning;

wherein said at least one guiding ring extends in a direction parallel to a longitudinal direction of the casing (Fig. 2);

wherein the ribs incline along an air-driving direction of the blades of the impeller (Figs. 3-5); and

wherein the at least one guide ring 16 has a rounded guiding portion in a top thereof adjacent to an air inlet side of the casing (Fig. 2).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3 and 4, as far as they are definite, are rejected under 35 U.S.C. 103(a) as being unpatentable over Harmsen in view of Zhang (6,722,418).

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Harmsen discloses all the limitations except the at least one guide ring does not extend radially outward and downward; and the at least one guide ring does not extend radially inward and downward as claimed.

Zhang teaches a fan (Figs. 1-3) comprising a housing, an impeller disposed in the housing, the outlet of the fan housing is attached to a support frame 32 having a central portion, a plurality of ribs extending radially outward from the central portion, and a plurality of axially inclined guide rings 36 attached to the ribs to guide the flow toward the center of the supporting frame (col. 2, lines 27-32).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made, to make the heat-dissipating fan of Harmsen with the guiding extending either radially outward and toward downstream or radially inward and toward downstream of the fan for the purpose of directing the flow as taught by Zhang.

Allowable Subject Matter

7. Claim 8 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. Claim 5, 6, 12-15, and 17-20 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

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Prior Art

The prior art made of record but not relied upon is considered pertinent to applicant's disclosure and consists of 3 patents.

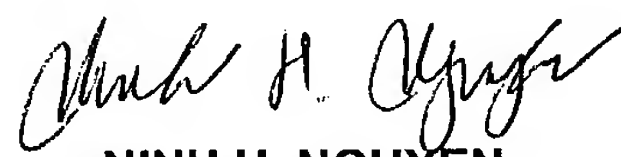
Segalman (2,653,757), Mohr et al. (6,601,546), and Cho et al. (6,398,492) are cited to show fans having guide rings.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Ninh Nguyen whose telephone number is (703) 305-0061 or (571) 272-4823 after November 18, 2004. The examiner can be normally reached on Monday-Friday from 7:30 A.M. to 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look, can be reached at (703) 308-1044 or (571) 272-4820 after November 18, 2004. The fax number for this group is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0861.


NINH H. NGUYEN
PRIMARY EXAMINER

Nhn
September 24, 2004